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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,368	01/14/2002	Shahriar Rokhsaz	X-926 US	5496

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EXAMINER	
LEE, CHI HO ANDREW	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/047,368	ROKHSAZ ET AL.	
	Examiner	Art Unit	
	Andrew Lee	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-194* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-194* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Regarding claims 15 51, 86, 115, the phrase "type" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

3. Claims 36, 93-97, 100, 120, 121, 124, 125, 151, 167, 184 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re Claims 93, 121, 125, It is unclear what is meant by "substantially equal" means. Applicant is requested to reference the specifications.

Re Claims 36, 100, 120, 151, 167, 184, "operably" should be deleted because its optional language and lacks positive recitation.

Claim 120 recites the limitation "the MAN" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-15, 17-50, 52-85, 87-92, 98-114, 116-120, 122, 123, 126-172 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al U.S. Patent Number 6,859,466.

Re Claims 1, 70, 98, 99, 126, 127, 128, 129, 144, 151, 152, fig. 1 teaches a base station 101 (a first data transceiving entity) transmitting a data burst (a data unit) addressed to a ST 103, the burst packet includes a payload data and overhead data wherein the overhead data includes address information to the destination ST (at least one target entity); fig. 6, step 101 teaches 601 generating a burst packet wherein the payload data and overhead data are formatted in accordance to the default coding and modulation scheme (first and second transmission format convention); step 603 transmits the formatted data burst to the addressed ST; step 605 receives the formatted data burst at the ST and deformats the overhead and payload using the default coding and demodulation scheme whereby step 607 examines layer header to determine the coding and modulation scheme and steps 609, 611 demodulates and decode the data burst using the determined schemes to reconstruct the retrieved payload data and overhead data (See col. 7, lines 8-32).

Re Claims 2, 37, 72, 101, fig. 7 teaches 701 receiving the data from a network 727 (a source external to the LAN 723 (MAN) and receiving the data from and LAN device (a source) in 723 whereby 701 also generates the data.

Re Claims 3, 5, 7, 23, 25, 38, 42, 56, 60, 73, 75, 77, 102, 106, 130, 133, 154, refer to Claim 1, wherein the default-coding & modulation scheme is used to encode the payload.

Re Claims 4, 9, 22, 28, 39, 45, 57, 58, 63, 74, 80, 103, 104, 109, 123, 136, 147, 153, 159, 168, 169, refer to Claim 1, wherein table 1 (See col. 5, lines 35-50) teaches a block encoding the payload data

Re Claims 6, 24, 41, 59, 76, 105, 132, 155, refer to Claim 1, wherein table 2 teaches a data rate (See col. 6, lines 3-16), wherein the table illustrates the determined coding rate, size

Re Claims 8, 13, 40, 43, 78, 107, 122, 139, 146, refer to Claim 1, wherein the modulation scheme includes QPSK (See col. 6, lines 22-32).

Re Claims 11, 12, 21, 27, 29, 30, 47, 82, 110, 111, 131, 135, 137, 138, 156, refer to Claim 1, wherein the determined coding and modulation scheme (the second transmission format convention) is used to produce the formatted overhead data.

Re Claims 14, 15, 17, 32, 44, 46, 49, 52, 64, 65, 67, 79, 81, 84, 87, 91, 108, 113, 116, 140, 148, 149, 150, 158, 160, 161, 163, 170, 171, 172 refer to Claims 1, 2, fig. 1 includes a packet based Satellite switch 107 for receiving uplink (a first communication path) packet format from 101 (See fig. 4), the data burst packet is interpreted by 107 to determine whether it is the destination or intermediate destination of the payload data and reformats (modifying...link layer... and physical layer information) the packet for downlink (a second communication path) transmission (See fig. 5) (See col. 3, lines 53-

58) the destination ST wherein the downlink packet format identifies the ST (the target entity) and the coding scheme (data use information).

Re Claims 18, 20, 26, 31, 33, 48, 53, 55, 61, 62, 66, 68, 83, 88, 90, 112, 117, 134, 141, 157, 162, 164, refer to Claim 1, the system supports TDMA synchronous (time frames) transmission of the formatted payload and overhead data.

Re Claims 19, 34, 54, 69, 89, 118, 119, 142, 145, 165 refer to Claim 1, wherein packets are frames.

Re Claims 35, 50, 70, 85, 114, 143, 166, refer to Claims 14 and 18, wherein the Base station includes a controller for setting a communication path between base station and the satellite switch (the intermediate destination), wherein the path is associated with an assigned frequency and time slot whereby the satellite tunes (monitoring at least one communication path) to receive the uplink signal.

Re Claims 36, 100, 167, refer to Claim 1, wherein fig. 7 includes a Processor 705 performing plurality of functions (a first and second processing module) coupled to the Main memory 707 (a first memory) for storing instructions (first operational instructions) for the 705 wherein the instructions (a second operational instructions) are associated with the steps of fig. 6 and ROM 709 (a second memory) for storing instructions for 705.

6. Claims 173- are rejected under 35 U.S.C. 102(e) as being anticipated by Greaves et al U.S. Patent Number 7,072,056.

Re Claims 173, 184, fig. 3 teaches S1 for receiving data for first communication protocol; S2 for converting data to second data format (a local protocol); S3 translating data (processing/converting the data) to the identified second communication protocol.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 16, 51, 86, 115 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al U.S. Patent Number 6,859,466 in view of Greaves et al U.S. Patent Number 7,072,056.

Re Claims 16, 51, 86, 115, Chen et al fails to explicitly teach "determining the type of the at least one target entity...". However, Greaves et al teaches in fig. 3, sending a probe to identify the communication protocol associated with the destination device. As Chen et al is adaptive to the propagation delay for plurality of communication devices, one skilled in the art would have been motivated by Greaves to modify Chen et al to include to protocol identification to be adaptive to different communication protocols used by the plurality of devices. Therefore, it would have been obvious to one ordinary skilled to combine the references.

9. Claims 174-194 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greaves et al U.S. Patent Number 7,072,056 in view of Chen et al U.S. Patent Number 6,859,466.

Re Claims 174, 184, Greaves fails to explicitly teach formatting the payload data and the overhead data using different transmission format convention. Chen et al

teaches such process to adaptive to different propagation delay. One skilled in the art would have motivated to combine the references to improve throughput.

Re Claims 175, refer to Claim 174, wherein protocol translation is the interworking unit.

Re Claims 176-180, refer to Claim 174, wherein the communication network of Greave can be modify to support satellite connectivity as suggested by Chen et al, whereby the formatted packet (payload and overhead data) are transmitted over the same uplink.

Re Claims 181, 182, 185-191, refer to Claim 174, wherein Chen teaches that the downlink packet includes coding and modulation identifiers for formatting the overhead and payload of the packet burst (deformating...payload and overhead data) whereby the destination terminals uses to adapt for the propagation delay and reconstruct the data burst.

Re Claims 183, 192, 193, 194, refer to Claim 174, wherein the Satellite includes a switch and processor for modifying the packet format between uplink and downlink formats.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Lee whose telephone number is 571-272-3130. The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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ANDREW C. LEE
PRIMARY PATENT EXAMINER